

The book may be criticized for a certain repetition and some diffuseness of style. It is, however, a comprehensive review of present knowledge of this important subject.

E J C KENDALL

#### **Intersexuality in Vertebrates including Man**

edited by C N Armstrong and A J Marshall  
pp xi+479 illustrated 90s

*London & New York: The Academic Press 1964*

A number of books on intersexuality have been published in recent years, and some of them have given superb and extensive accounts of its clinical aspects. The special value of the present volume is that it covers the comparative aspects and its editors are to be congratulated, not only on the selection of contributors but on the general plan of the book. The introduction, by Marshall, is a very entertaining brief account of the early history of the subject and is followed by what is virtually a monograph on chromosomes and their deviations in the sex of vertebrates by Beatty. Intersexuality in fishes, by Atz, which follows, is heavy going; the subject is complicated and essentially one for the expert. Intersexuality in amphibians, by Foote, is shorter and perhaps rather easier to comprehend while the next chapter, on reptiles by Forbes, occupies a mere 12 pages, reflecting the less intensive study of this Order. Intersexuality in birds, by Taber, covers more familiar ground, and the next chapter, on mammals, by Bruner-Lorand, presents no great problems for the medical reader. The two final chapters, on intersexuality in man, by Armstrong, and on psychiatric aspects of intersexuality, by Roth and Ball, can be read with profit by any clinician interested in the subject. Altogether a book of high standards of scholarship and one to be recommended.

G I M SWYER

#### **The Role of the Gastrointestinal Tract in Protein Metabolism**

A Symposium organized by The Council for International Organizations of Medical Sciences

edited by H N Munro

pp xviii+402 illustrated 75s

*Oxford: Blackwell Scientific Publications 1964*

This symposium, held in Glasgow in August 1963, was divided into six sections and comprises a total of 25 contributions from laboratories in various parts of the world.

The selected title appears, at first, to be somewhat unusual, because the gastrointestinal tract is often considered to be an organ which exists solely for the purpose of absorbing ingested foodstuffs and not one which takes an active part in metabolism. However, papers in Section II –

Endogenous Nitrogen of Non-Ruminants – show that a large proportion of absorbed amino acids are endogenous and are formed by digestion of mucosal cells and digestive enzymes, a fact which emphasizes the importance of the gastrointestinal tract in the overall protein turnover. Catabolism of plasma proteins in the gastrointestinal tract is also discussed.

The more conventional role of the gastrointestinal tract is not ignored and several papers describe experiments on processes of protein digestion and amino acid absorption in the rat, dog, pig, chicken, sheep, cow and man.

A complete section is devoted to ruminant digestion and there is a useful account of the effects of the bacterial flora on proteins and amino acids in the intestinal tracts of several species.

Of direct clinical interest are studies on the Relation of Gastroenteritis to Protein Malnutrition in Infants, Gluten-induced Enteropathy, Gastrointestinal Loss of Protein as a cause of Hypoalbuminæmia and two papers on Amino Acid Absorption in Malabsorption States are included.

All papers are followed by interesting discussions and supported by adequate references. There is a useful general index and despite the wide range of species encompassed by the symposium, it is well worth reading by all those who are interested in research into protein metabolism and disorders of the gastrointestinal tract.

E D WILLS

#### **Progress in Surgery – Vol. 4**

edited by M Allgöwer

pp viii+109 illustrated SFr/DM 30

*Basel & New York: S Karger 1964*

This is really a monograph on certain aspects of surgical shock. It is interesting, provoking and a splendid source of references to this field. It opens with an article on the kidney by two Danish workers who review methods of measuring renal function in man, describe the changes found in renal failure, including the morbid anatomy, and conclude that the available data do not support the oft repeated view that renal hypoxia is the cause.

Bull of Birmingham reviews the effects of blood loss, and stresses that the volume lost is often underestimated. The concluding contribution from Los Angeles reviews a very difficult field: the relationship of liver function to shock. The literature is very well covered but the conclusions are not striking, although they adumbrate the importance of catecholamines in decreasing hepatic blood flow.

SELWYN TAYLOR